



US009638403B1

(12) **United States Patent
Marshal**

(10) **Patent No.:** **US 9,638,403 B1**

(45) **Date of Patent:** **May 2, 2017**

(54) **LED STREET LIGHT CONFIGURED FOR
TOOL-LESS INSTALLATION AND A
METHOD OF INSTALLATION**

2131/10; F21W 2131/101; F21W
2131/103; F21W 2131/105; F21W
2131/107; F21W 2131/109

See application file for complete search history.

(71) Applicant: **AMLED TECHNOLOGIES, INC.,**
Alsip, IL (US)

(56) **References Cited**

(72) Inventor: **Madan Marshal,** Alsip, IL (US)

U.S. PATENT DOCUMENTS

(73) Assignee: **AMLED Technologies, Inc.,** Itasca, IL
(US)

3,888,446 A * 6/1975 O'Brien F16B 7/0486
248/230.1
8,585,258 B2 * 11/2013 Ham F21V 29/20
362/294
9,163,823 B2 * 10/2015 Choksi F21V 29/2206
2012/0280639 A1 * 11/2012 Lin F21S 8/06
315/312
2015/0070923 A1 * 3/2015 Kadowaki F21S 48/1104
362/517
2015/0260362 A1 * 9/2015 Koga F21V 19/045
362/362

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/997,708**

(22) Filed: **Jan. 18, 2016**

FOREIGN PATENT DOCUMENTS

(51) **Int. Cl.**
F21V 21/116 (2006.01)
F21V 15/01 (2006.01)
F21V 21/108 (2006.01)
F21S 8/08 (2006.01)
F21V 19/00 (2006.01)
F21V 23/00 (2015.01)
F21Y 101/02 (2006.01)

IT WO 2015063807 A1 * 5/2015 F21S 8/086
TW DE 102013100026 A1 * 7/2014 F21V 25/02

* cited by examiner

Primary Examiner — Robert May

(74) *Attorney, Agent, or Firm* — Witters & Associates;
Steve Witters

(52) **U.S. Cl.**
CPC **F21V 21/116** (2013.01); **F21S 8/086**
(2013.01); **F21V 15/01** (2013.01); **F21V**
19/003 (2013.01); **F21V 21/108** (2013.01);
F21V 23/009 (2013.01); **F21Y 2101/02**
(2013.01)

(57) **ABSTRACT**

(58) **Field of Classification Search**

CPC F21Y 2101/02; F21Y 2105/00; F21Y
2105/003; F21Y 2105/006; F21Y
2105/02; F21Y 2105/022; F21Y
2105/025; F21V 21/116; F21V 15/01;
F21V 19/003; F21V 19/0035; F21V
23/026; F21V 19/004; F21S 8/086; F21W

An LED street light comprising a housing having a support
arm extending from a light emitting portion is presently
disclosed. The support arm is configured and disposed to
tool-lessly fastened and unfastened to and from a street light
post. An LED PCB having an array of LEDs is tool-lessly
removably held in the light emitting portion of the LED
street light. A tool-lessly removable driver is housed in the
LED street light. A method of installing the street light of the
present disclosure to a light post is also disclosed herein.

17 Claims, 14 Drawing Sheets

